The discussion on NLO SMEFT on page 7 is somewhat confusing. The authors talk about both QCD but also QED corrections, it is not clear to me which of the two is causing the problem. Maybe revising that paragraph can help.

We hope to have clarified the text by always specifying which NLO corrections are meant. In the original, we used "NLO" for "NLO QCD" which may give rise to confusion.

Is the "LO+1 jet" sample employed in Section 5.3 a merged sample? Or simply a tt+jet sample? This should be clarified.

The sample is matched with the MLM prescription as described in Sec. 4. We now reference this information in Sec. 5.3, to make it explicit.

Do the authors have uncertainties for Table 3? That would be useful to establish how well the reweighting performs.

Uncertainties were added to the table.

I am confused by the discussion of the two different scales in 5.7.1. It is not clear to me how a different choice of scale affects the fact that total=SM+Interference+Squared. Is this what the authors see? Can they clarify this?

The impact of the choice of scales on the closure of reweighting and separate-sample simulation is described in Sec. 4, first paragraph. In short, the default scale choice depends on the Feynman diagrams in the process through the Single Diagram Enhancement Method [reference]. A pedagogical description of this rather subtle problem was presented by O. Mattelaer in this [presentation]. As a result, the closure with the default Madgraph scale choice is only expected to hold within scale variations. As a remedy, we use the $H_T/2$ scale choice in checks of closure, for which there is no such limitation and closure is possible within the statistical uncertainty.

Requested changes
Fig. 3 the bottom row: it is worth adding a label within the plots to show what this it for the same sign transverse polarization.

The information has been added to the figure.

Tables 1 and 2 appear long before the text refers to them.

We now reference the Tables in Sec. 5, a bit before they appear in the text.

Linear and quadratic EFT contributions at NLO can be separated in MG v3. The authors should clarify this.

This information has been added by including the sentence
"The separation is possible in Madgraph5 aMC@NLO v3."

Could the authors consistently show Feynman diagrams for all processes they consider?
We have added representative diagrams for all cases and unified the style.

Can the authors make fig. 22 bigger?

Done.